TCA ENVIRONMENTAL. INC.

223 Pioneer Blvd., Springboro, OH 45066
Phone (513) 743-8909 Fax (513) 743-8919

REPORT

Environmental Remediation Report

Date: September 5, 2000

Site Descrip.: Valley Asphalt
Dryden Road
Moraine, Ohio
Montgomery County

Client: Valley Asphalt
11641 Mosteller Rd.
Cincinnati, Ohio 45241

This report is submitted in fulfillment of a proposal/contract between TCA Environmental, Inc., and the client.

I. PURPOSE:

The purpose of this report is to describe the remedial actions which have taken place and will occur at the referenced site.

II. BACKGROUND:

On May 17, 2000, personnel from Valley Asphalt uncovered barrels during the excavation and installation of a new sewer line.

III. WORK SYNOPSIS:

1. On May 17, 2000, a TCA Environmental geologist, David M. Scardino, collected composite sample from the contents of the barrels which were uncovered in the excavation.
2. Screening excavation and excavated soils for common isotopes.
3. Over packing of the barrels from the excavation.
4. Collection and analysis of a composite sample of the excavated soils on June 19, 2000.
5. Collection and analysis of water samples from the drinking water well and production well located on the site.
6. Capping of both ends of the sewer line with concrete.
7. Backfilling excavation with clay.
8. Removal and disposal of excavated soils.

IV. SITE INVESTIGATION;

1. Location:

The site is located in a heavily industrialized and commercial area adjacent to the Great Miami River.

2. Topography

The topography is fairly level, and surface drainage tends toward the south.

3. Geology

a. The site according to the soil survey of Montgomery county occupied an area which was a former gravel pit, which is defined as open excavations from which sand and gravel have been removed and the upper soil layers have been stripped away.

b. The site is underlain by unconsolidated glacial outwash deposits of the Great Miami Aquifer.

The unconsolidated glacial deposits consists of 25 to 250 feet of poorly sorted clay, silt sand, and gravel which overlie ordovican-aged interbedded shales and limestone of the Richmond Group. The bedrock occurs at depth of 180 to 240 feet below the surface. The shales and limestones in the bedrock are relatively impermeable in comparison to the sand and gravel aquifers.

4. Hydrology

a. Water use.

There are two on site wells located at the site.

b. Water resources.

The water resources in the area are excellent. Yields of more than 1,000 gallons per minute (g.p.m.), may developed.

5. Climate

The climate conditions at the site are typical for Ohio. The mean annual temperature is 51.9°F and average annual precipitation is 34 in.. Precipitation is the major recharge mechanism for ground water; six inches of total annual precipitation provides for ground water recharge (estimated).

V. REMEDIAL ACTIONS:

1. Soil Disposal

2216.79 tons of contaminated soils were removed and disposed of at Stoney Hollow landfill (see Appendix D for manifests.

2. Sample Collection Procedures

The soil samples were collected with a clean hand trowel. The sample bottles were labeled and sealed. The water samples were collected in jars with teflon seals. The samples were placed on ice and taken to the laboratory for analysis. Chain of custody was maintained.

3. Soil Stockpile Sampling

A composite sample was collected from the excavated soils (see 06/19/00, Valley composite for sample results).

4. Radiation Screening

On June 2, 2000, the excavation barrels and stockpiled soils were screened for radioactive substances. The results of the screening did not reveal any elevated levels of isotopes above background levels present.

5. Over packing of Barrels

The barrels from the excavation were placed in over packs (see Valley Dryden A 05/17/00, for a composite sample of the barrels contained in the excavation).

6. Capping of Sewer Line

On June 2, 2000, the both ends of the sewer line were capped with concrete and the excavation was filled with clay (see Appendix H for photo documentation).

7. Water Samples

A water sample was collected from the drinking water well and the production well located adjacent to the excavation (see Valley PW 06/02/00 and Valley GW 05/19/00 for laboratory results).

VI. CONCLUSIONS:

It is mandatory that prior to excavation activities at this site a permit to engage in filling, scraping, excavating, building, drilling, or mining on land where a hazardous waste facility or solid waste facility was operated be obtained from the Ohio EPA. The results of the ground water samples collected from the two wells located on site war below Ohio M.C.L. levels.

VII. RECOMMENDATIONS:

It is recommended that a alternate pathway for the underground utility should be found.

Thank you for choosing TCA Environmental, Inc., for the project. If you have any questions, please call.

Sincerely,

TCA ENVIRONMENTAL, INC.
David M. Scardino
Geologist/Environmental Scientist

Belmonte Park
Environmental
Laboratories

Order # 00-05-664
06/01/00 09:09

TEST RESULTS BY SAMPLE

Sample: 01A VALLEY DRYDEN A 05/17/00 Collected: 05/17/00 Category: SOLID

Test Description	Result	Detection Limit	Units	Analyzed	By
EXTRACTION, TCLP	-		-		AMS
EXTRACTION, PESTICIDES	-		-		CJ
PAINT FILTER, EPA 9095	0		%	05/24/00	LG

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TEST RESULTS BY SAMPLE

Sample Description: **VALLEY DRYDEN A 05/17/00** Lab No: **01A**
Test Description: **VOLATILE ORGANICS 8260B** Method: **SW_846_8260B** Test Code: **SW8260**
Collected: **05/17/00** Category: **SOLID**

PARAMETER	RESULT	LIMIT
ACETONE	BDL	2500
ACROLEIN	BDL	2000
ACRYLONITRILE	BDL	2000
BENZENE	7000	500
BROMODICHLOROMETHANE	BDL	500
BROMOFORM	BDL	500
BROMOMETHANE	BDL	500
2-BUTANONE	2500	2500
CARBON DISULFIDE	BDL	500
CARBON TETRACHLORIDE	BDL	500
CHLOROBENZENE	1700	500
CHLORODIBROMOMETHANE	BDL	500
CHLOROETHANE	BDL	500
2-CHLOROETHYL VINYL ETHER	BDL	2000
CHLOROFORM	BDL	500
CHLOROMETHANE	BDL	500
DIBROMOMETHANE	BDL	500
1,4-DICHLORO-2-BUTENE	BDL	500
DICHLORODIFLUOROMETHANE	BDL	500
1,1-DICHLOROETHANE	BDL	500
1,2-DICHLOROETHANE	BDL	500
1,1-DICHLOROETHENE	BDL	500
trans-1,2-DICHLOROETHENE	BDL	500
1,2-DICHLOROPROPANE	BDL	500
cis-1,3-DICHLOROPROPENE	BDL	500
trans-1,3-DICHLOROPROPENE	BDL	500
ETHYLBENZENE	84000	2000
ETHYL METHACRYLATE	BDL	2500
2-HEXANONE	BDL	2500
IODOMETHANE	BDL	500
METHYLENE CHLORIDE	BDL	500
4-METHYL-2-PENTANONE	18000	2500
STYRENE	BDL	500
1,1,2,2-TETRACHLOROETHANE	BDL	500
TETRACHLOROETHENE	BDL	500
TOLUENE	530000	5000
1,1,1-TRICHLOROETHANE	BDL	500
1,1,2-TRICHLOROETHANE	BDL	500

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TEST RESULTS BY SAMPLE

Sample Description: **VALLEY DRYDEN A 05/17/00** Lab No: **01A**
Test Description: **VOLATILE ORGANICS 8260B** Method: **SW_846_8260B** Test Code: **SW8260**
Collected: **05/17/00** Category: **SOLID**

TRICHLOROETHENE	64000	2000
TRICHLOROFLUOROMETHANE	BDL	500
1,2,3-TRICHLOROPROPANE	BDL	500
VINYL ACETATE	BDL	2000
VINYL CHLORIDE	840	500
XYLENE	340000	2000

SURROGATE	%RECOVERY	LIMITS
d4-1,2-DICHLOROETHANE	113	70 - 121
d8-TOLUENE	93	81 - 117
4-BROMOMFLUOROBENZENE	100	74 - 121

Notes and Definitions for this Report:

DATE RUN 05/22/00
ANALYST AS
INSTRUMENT GC/MS
FILE ID X0052220
UNITS ug/Kg
METHOD GPA-8260
BDL BELOW DETECTION LIMIT

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06/01/00 09:09

TEST RESULTS BY SAMPLE

Sample Description: **VALLEY DRYDEN A 05/17/00** Lab No: **01A**
Test Description: **PCB/PESTICIDES SW8080** Method: **SW_846_8080** Test Code: **SW8080**
Collected: **05/17/00** Category: **SOLID**

PARAMETER	RESULT	LIMIT
ALDRIN	BDL	0.1
ALPHA-BHC	BDL	0.1
BETA-BHC	BDL	0.1
DELTA-BHC	BDL	0.1
GAMMA-BHC	BDL	0.1
CHLORDANE	BDL	0.1
4,4-DDT	BDL	0.1
4,4-DDE	BDL	0.1
4,4-DDD	BDL	0.1
DIELDRIN	BDL	0.1
ALPHA ENDOSULFAN	BDL	0.1
BETA ENDOSULFAN	BDL	0.1
ENDOSULFAN SULFATE	BDL	1
ENDRIN	BDL	0.1
ENDRIN ALDEHYDE	BDL	0.2
HEPTACHLOR	BDL	0.3
HEPTACHLOR EPOXIDE	BDL	1
PCB-1016	BDL	1
PCB-1221	BDL	2
PCB-1232	BDL	1
PCB-1242	BDL	1
PCB-1248	BDL	1
PCB-1254	75000	1
PCB-1260	BDL	1
TOXAPHENE	BDL	2
METHOXYCHLOR	BDL	2

SURROGATE	%RECOVERY	LIMITS
DBC	88	70 - 130
TCX	77	70 - 130

Notes and Definitions for this Report:

DATE RUN 05/24/00
ANALYST THB
INSTRUMENT GC
FILE ID A05242
UNITS ug/Kg

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Order # 00-05-664
06/01/00 09:09

TEST RESULTS BY SAMPLE

Sample Description: **VALLEY DRYDEN A** **05/17/00** Lab No: **01A**
Test Description: **METALS,** **EPA 1311** Method: **EPA 1311** Test Code: **TCLP_M**
Collected: **05/17/00** Category: **SOLID**

PARAMETER		RESULT	LIMIT
ARSENIC	6010 A	BDL	0.1
BARIUM	6010 A	1.92	0.01
CADMIUM	6010 A	2.11	0.01
CHROMIUM	6010 A	BDL	0.01
LEAD	6010 A	8.26	0.05
MERCURY	7470	BDL	0.002
SELENIUM	6010 A	BDL	0.1
SILVER	6010 A	BDL	0.01

Notes and Definitions for this Report:

EXTRACTED 05/22/00
DATE RUN 05/23/00
ANALYST RJE
UNITS mg/L
METHOD EPA 1311
BDL BELOW DETECTION LIMIT

11 East Main Street Dayton, Ohio 45426 (937) 837-3744